

We Claim:

1. A method for exchanging data between a program-controlled device and a logic circuit, which comprises:

providing a first line connecting the program-controlled device and the logic circuit;

providing a bidirectionally usable second line connecting the program-controlled device and the logic circuit;

transmitting a control signal from the program-controlled device to the logic circuit over the first line; and

placing the second line in a dominant state with the logic circuit when the logic circuit is to make a data transmission.

2. The method according to claim 1, which further comprises using a microcontroller as the program-controlled device.

3. The method according to claim 1, which further comprises:

requesting data to be transmitted by the program-controlled device;

changing a level of the control signal;

enabling data transmission to the logic circuit by maintaining a recessive state in the second line for a predetermined time after the change in level of the control signal;

switching the second line to the dominant state by the program-controlled device after the predefined time has expired; and

starting a data transmission from the program-controlled device to the logic circuit after changing the level of the control signal.

4. The method according to claim 3, which further comprises switching the second line to the recessive state by the program-controlled device before the predefined time has expired to allow data transmission from the logic circuit to the program-controlled device.

5. The method according to claim 1, which further comprises:

sending a request to receive from the program in the program-controlled device;

placing the second line in the recessive state;

maintaining the second line in the recessive state;

placing the control signal in an initial level; and

waiting for the predefined time.

6. A system for exchanging data, comprising:

a program-controlled device;

a logic circuit;

a first line conducting a control signal from said program-controlled device to said logic circuit; and

a bidirectionally usable, second line connecting said program-controlled device to said logic circuit, said second line being placeable in a dominant state by said logic circuit when data transmission is to be made by said logic circuit.

7. The system according to claim 6, wherein said program-controlled device is a microcontroller.

8. The system according to claim 6, wherein the control signal is a strobe.

9. The system according to claim 6, wherein:

said second line carries a control signal;

said program-controlled device and said logic circuit form programs for transmitting data;

said second line enables data transmission from said logic circuit to said program-controlled device by maintaining a recessive state for a predefined time after a level change of the control signal and switching said second to the dominant state by the program-controlled device after the predefined time has expired; and

said program-controlled device starts to transmit data to the logic circuit following the level change of the control signal.

10. The system according to claim 9, wherein said program-controlled device switches said second line to the recessive state before the predefined time has expired to enable data transmission from said logic circuit to said program-controlled device.

11. The system according to claim 6, wherein:

said second line is in the recessive state; and

said program-controlled device requests to receive data, maintains said second line in the recessive state, places the

control signal in the first level, and starts counting the predefined time.